IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of detecting an interfering signal in a time division multiple access (TDMA) radio receiver, the method comprising:

taking samples from symbol sequences of a received signal over a TDMA timeslot;

generating by a modulation detector a signal path corresponding to the TDMA timeslot or a portion thereof;

determining an error estimate representing the erroneousness of the signal path generated;

comparing the error estimate representing the erroneousness of the signal path generated with a predetermined threshold value; and

recognizing the reception of the interfering signal if the error estimate is greater than the predetermined threshold value,

wherein the error estimate representing the erroneousness of the signal path is a signal path error metric which is generated by means of quadratic errors which are calculated on the basis of the difference between individual symbol sequence specific sample points and corresponding reference constellation points constructed on the basis of the channel estimate describing the state of the radio channel used.

2. (Previously Presented) The method of claim 1, further comprising using in the comparison an error estimate of a signal path corresponding to a half timeslot.

3. (Cancelled)

4. (Currently Amended) The method of claim 1 or 2, further comprising:

generating two or more alternative signal paths from the received timeslot or a portion thereof by two or more parallel modulation detectors ~~preferably~~ of different types,

determining an error estimate of each signal path, and

selecting the signal path having the best error estimate to be used in the comparison.

5. (Currently Amended) Equipment for detecting an interfering signal in a time division multiple access (TDMA) radio receiver, the equipment comprising:

means for taking samples from symbol sequences of a received signal over a TDMA timeslot; and

a modulation detector for generating a signal path corresponding to the TDMA timeslot or a portion thereof, wherein

the equipment is arranged to determine an error estimate representing the erroneousness of the signal path generated, ~~and~~ to compare the error estimate representing the erroneousness of the signal path generated with a predetermined threshold value, and ~~the equipment is also arranged~~ to recognize the reception of the interfering signal if the error estimate is greater than the predetermined threshold value, and

the equipment is arranged to use a signal path error metric, which is generated by means of quadratic errors calculated on the basis of the difference between individual symbol sequence specific sample points and corresponding reference constellation points constructed on the basis of the channel estimate describing the state of the radio channel used, as the error estimate representing the erroneousness of the signal path.

6. (Previously Presented) The equipment of claim 5, further arranged to use in the comparison an error estimate of a signal path corresponding to a half timeslot.

7. (Cancelled)

8. (Currently Amended) The equipment of claim 5 or 6, comprising two or more parallel modulation detectors ~~preferably~~ of different types for generating two or more alternative signal paths from the received timeslot or a portion thereof, the equipment being arranged to determine an error estimate of each signal path and to select the signal path having the best error estimate to be used in the comparison.

9. (New) A method of detecting an interfering signal in a time division multiple access (TDMA) radio receiver, the method comprising:

taking samples from symbol sequences of a received signal over a TDMA timeslot;

generating by a modulation detector a signal path corresponding to the TDMA timeslot or a portion thereof;

determining an error estimate representing the erroneousness of the signal path generated;

comparing the error estimate representing the erroneousness of the signal path generated with a predetermined threshold value; and

recognizing the reception of the interfering signal if the error estimate is greater than the predetermined threshold value,

wherein the error estimate is at least in part generated by individually determining a plurality of point to point quadratic error comparisons between the generated signal path and a reference signal path.

10. (New) Equipment for detecting an interfering signal in a time division multiple access (TDMA) radio receiver, the equipment comprising:

means for taking samples from symbol sequences of a received signal over a TDMA timeslot; and

a modulation detector for generating a signal path corresponding to the TDMA timeslot or a portion thereof, wherein

the equipment is arranged to determine an error estimate representing the erroneousness of the signal path generated, to compare the error estimate representing the erroneousness of the signal path generated with a predetermined threshold value, and to recognize the reception of the interfering signal if the error estimate is greater than the predetermined threshold value, and

the equipment is further arranged to at least in part generate the error estimate by individually determining a plurality of point to point quadratic error comparisons between the generated signal path and a reference signal path.